STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
300 W. Preston Street, Suite 202, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

Office of Preparedness & Response
Sherry Adams, Director
Isaac P. Ajit, Deputy Director

August 10, 2012

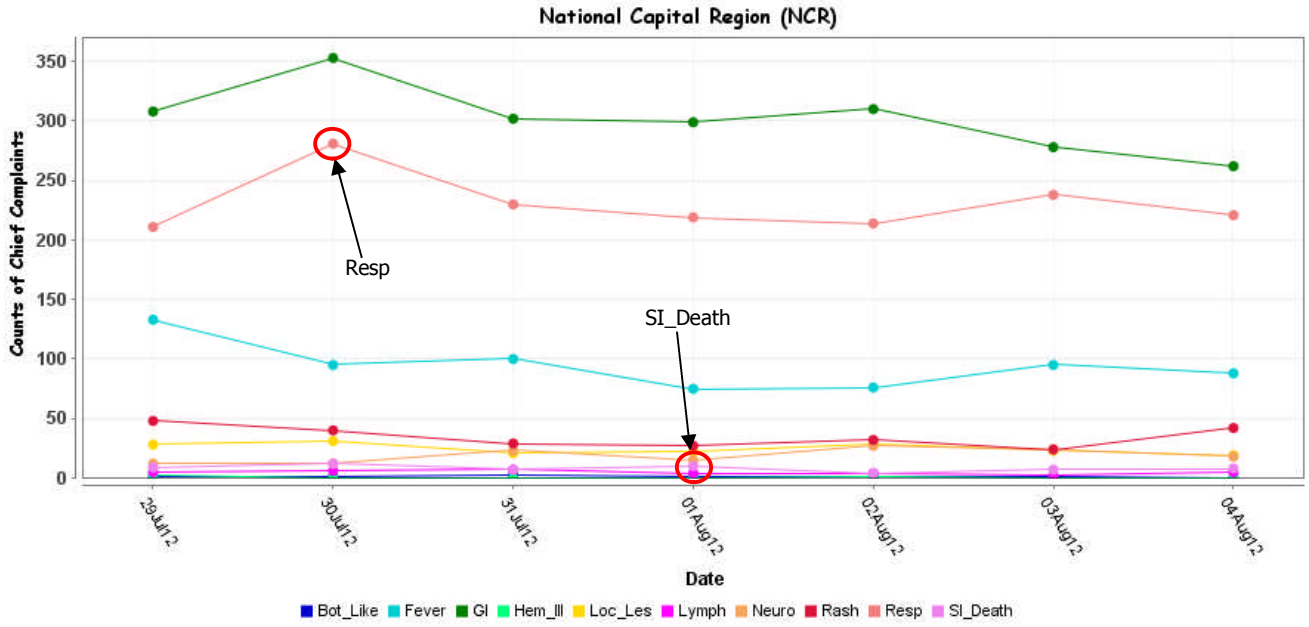
Public Health & Emergency Preparedness Bulletin: # 2012:31
Reporting for the week ending 08/04/12 (MMWR Week #31)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

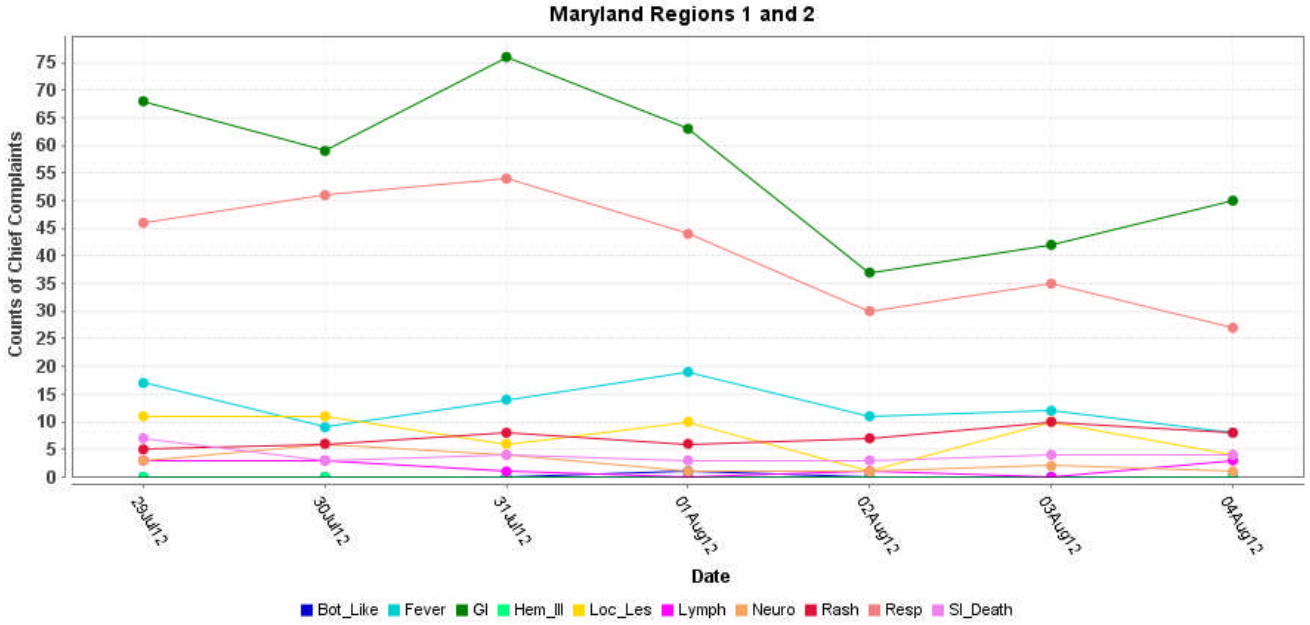
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

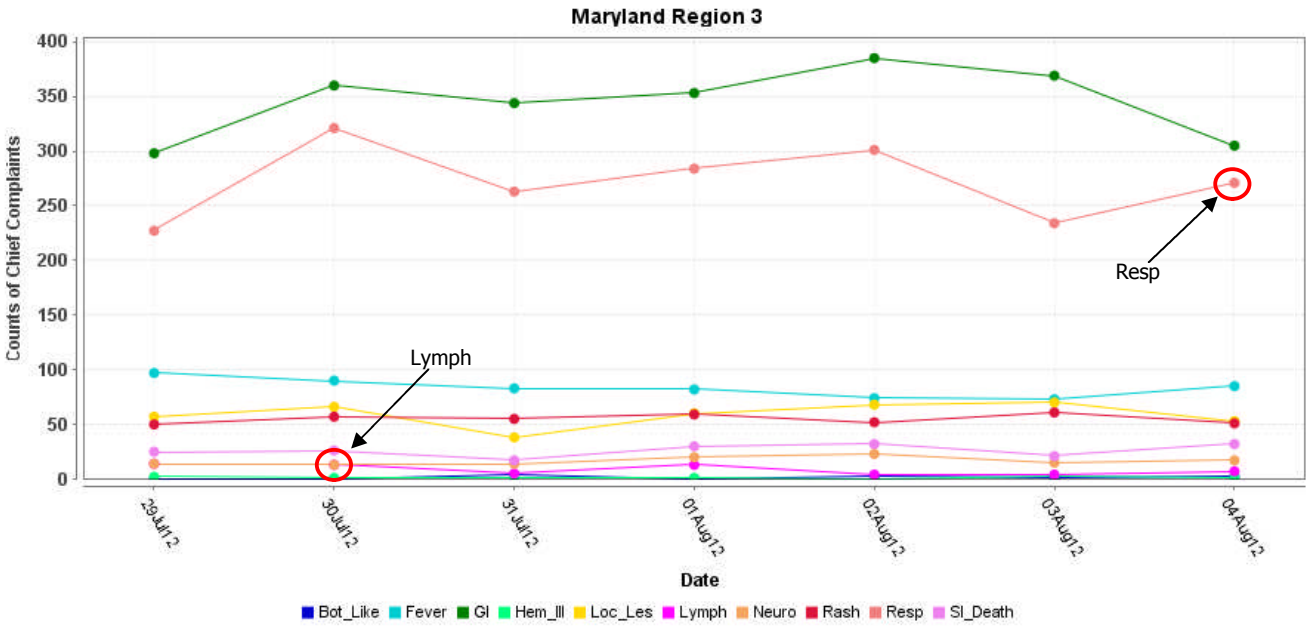


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

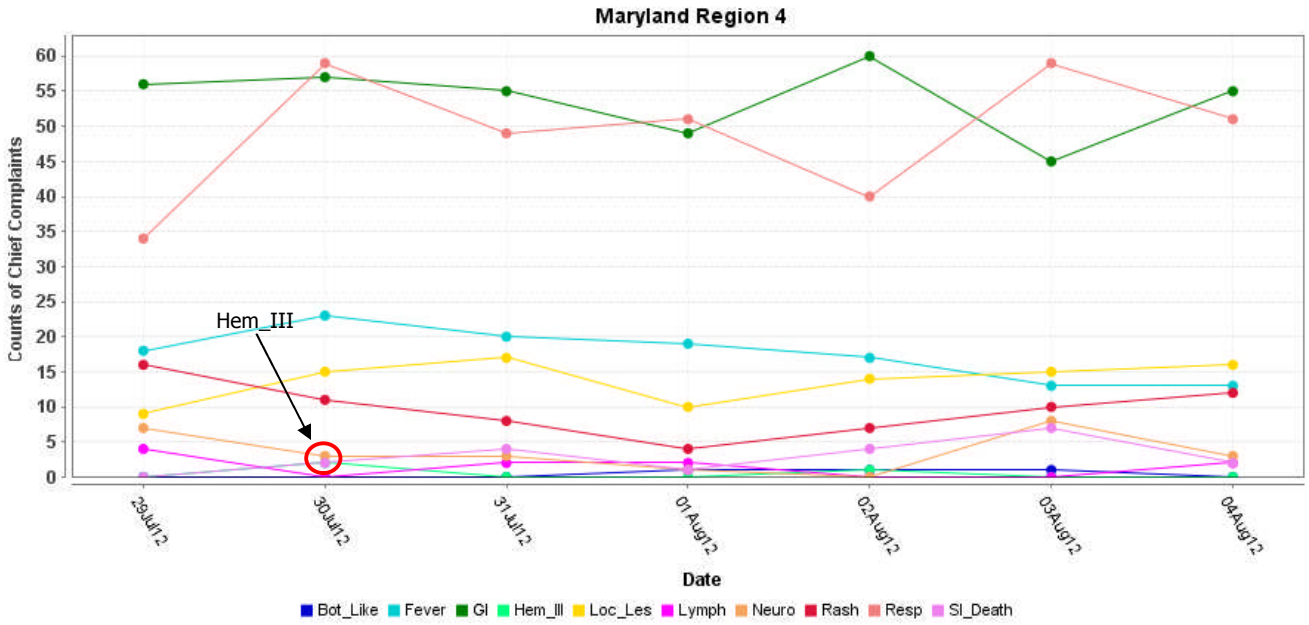
MARYLAND ESSENCE:



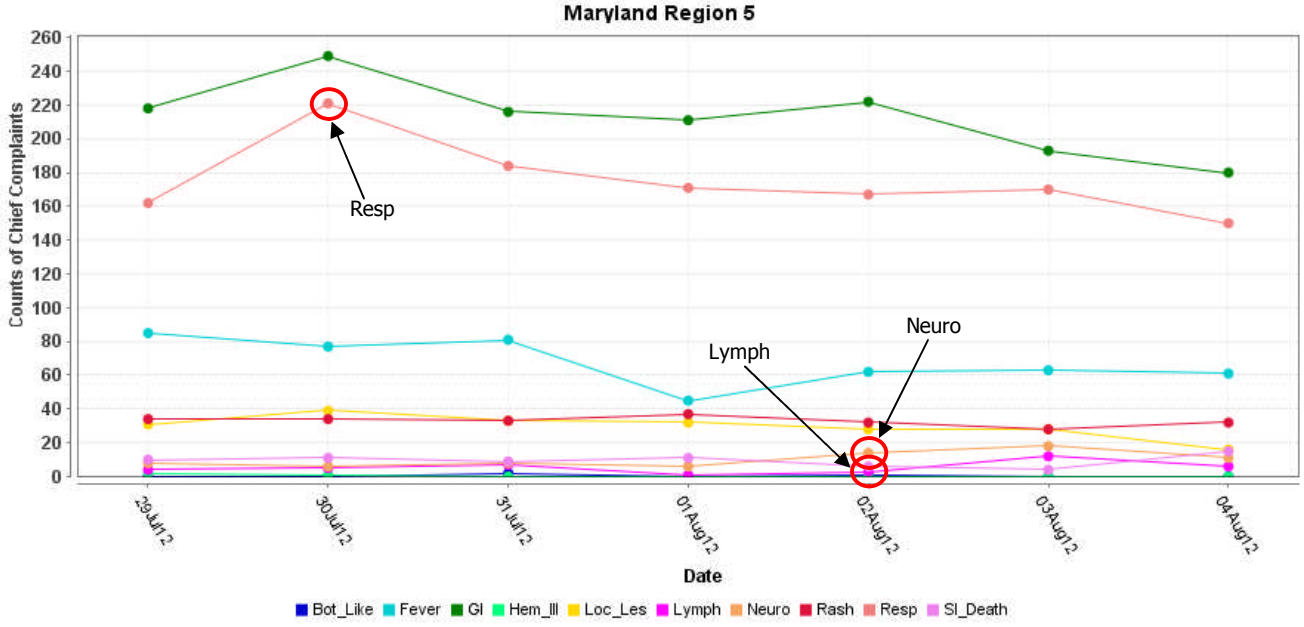
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



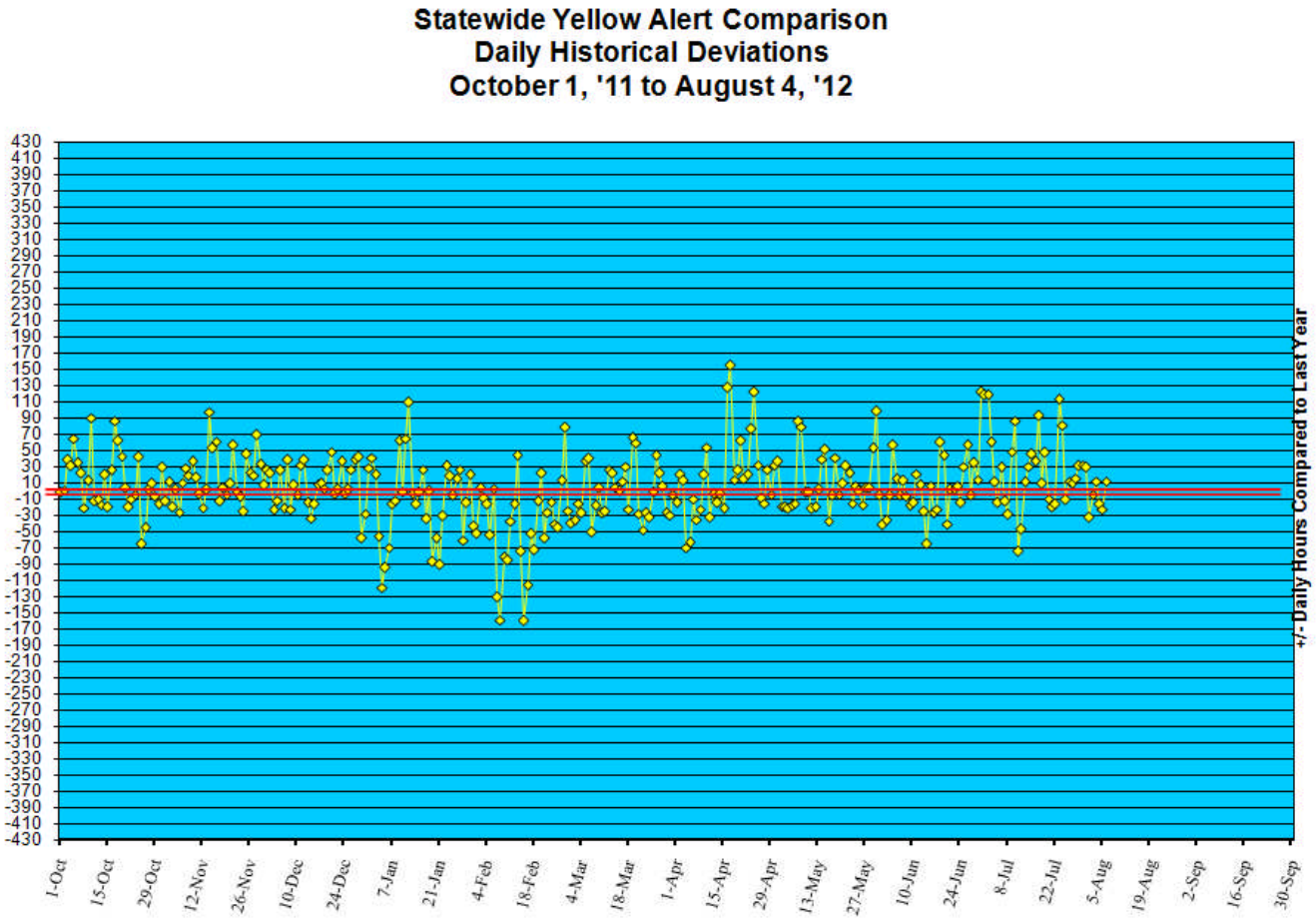
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2012 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (July 29 – August 4, 2012):	12	0
Prior week (July 22 – July 28, 2012):	9	0
Week#31, 2011 (July 30 – August 5, 2011):	22	0

5 outbreaks were reported to DHMH during MMWR Week 31 (July 29- August 4, 2012)

2 Gastroenteritis outbreaks
1 outbreak of GASTROENTERITIS in a Nursing Home
1 outbreak of GASTROENTERITIS in an Assisted Living Facility

1 Foodborne outbreak
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Restaurant

2 Rash illness outbreaks
1 outbreak of SCABIES in a Hospital
1 outbreak of SCABIES in a Nursing Home

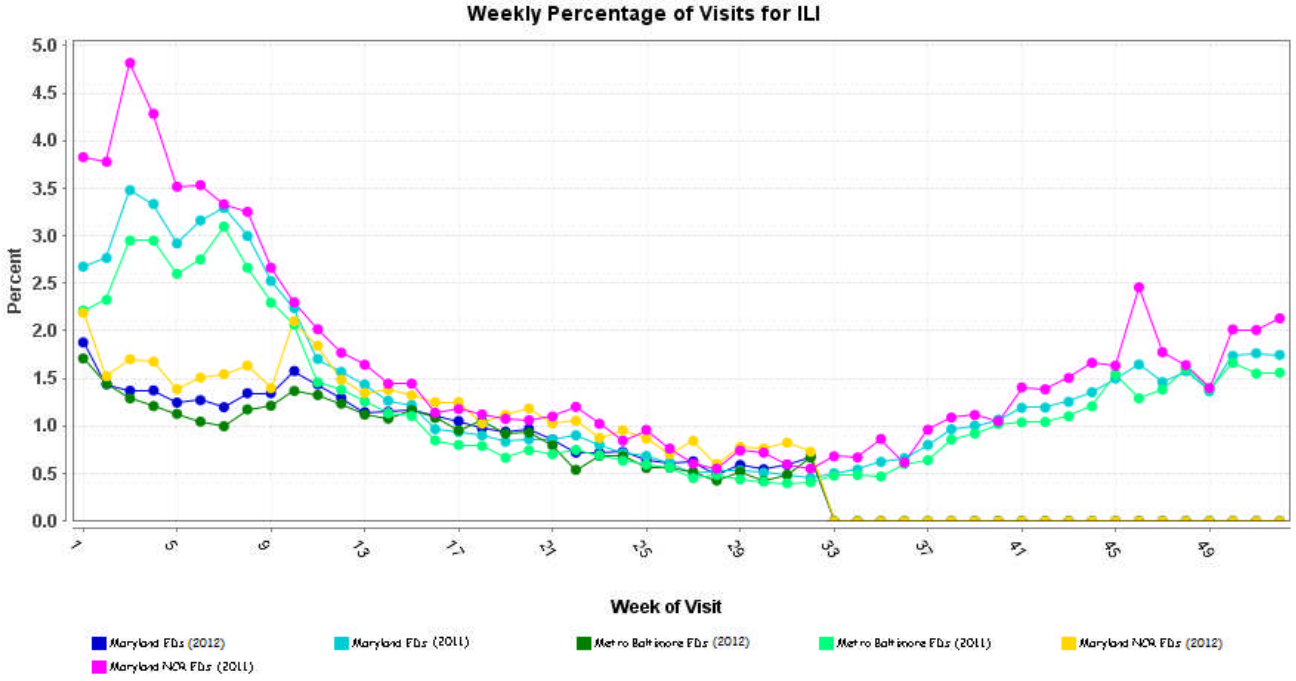
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

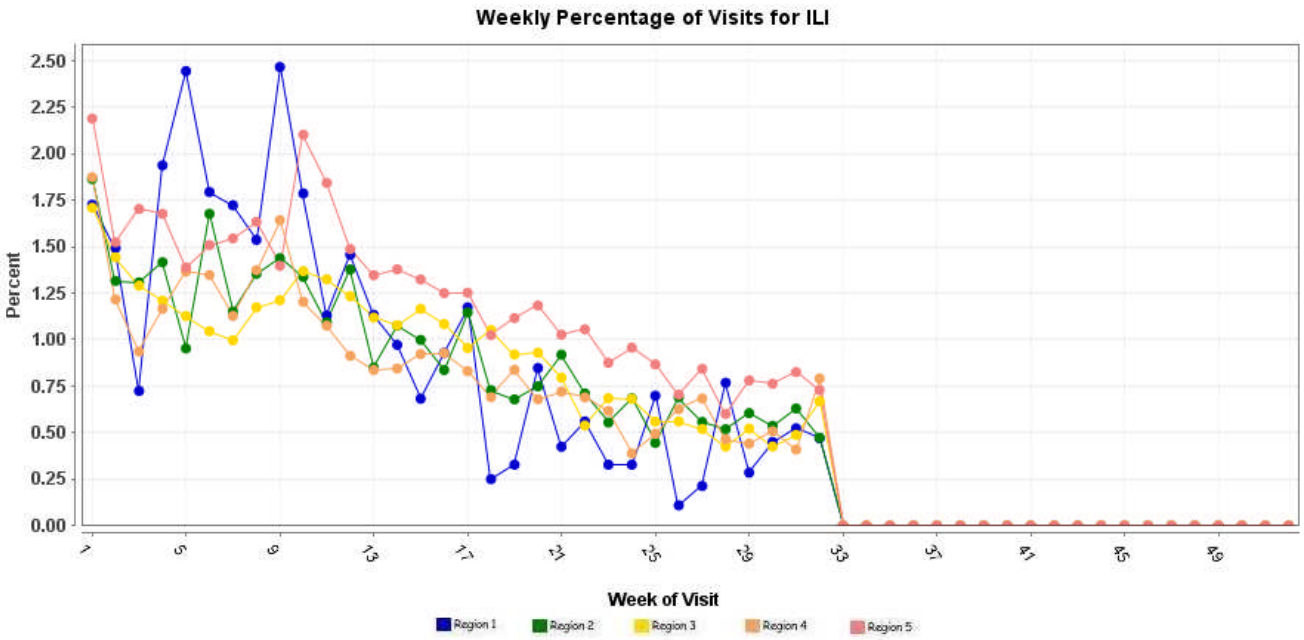
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



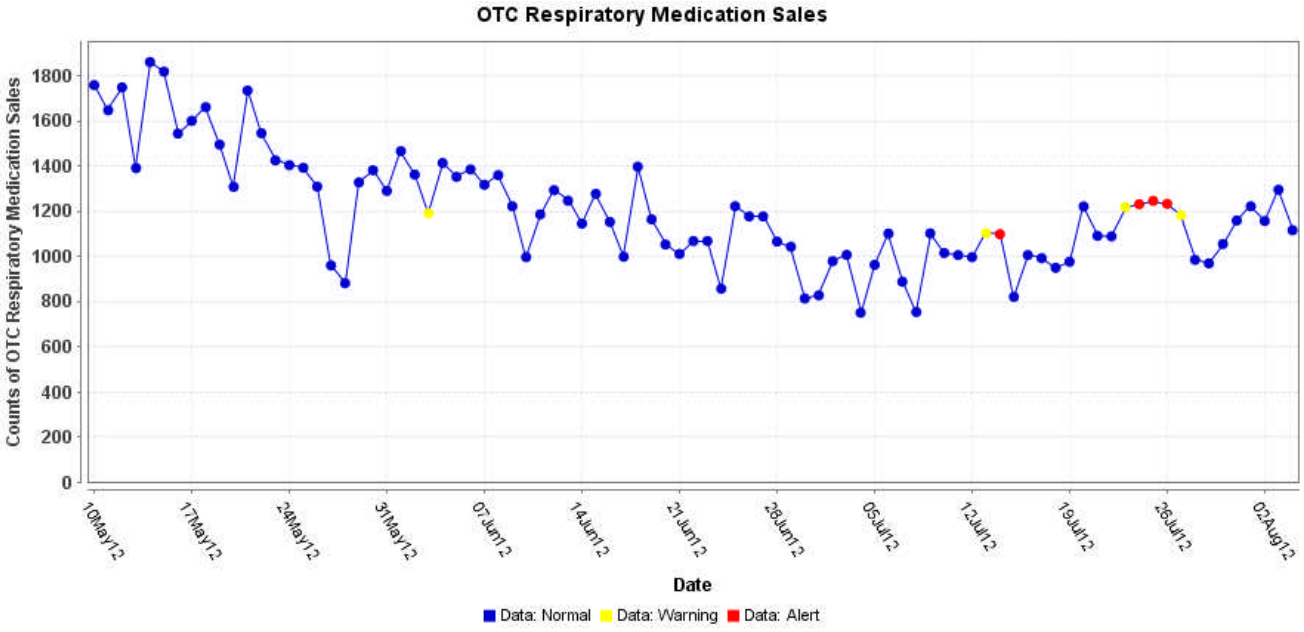
* Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2012 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of July 6, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 607, of which 358 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (MEXICO): 19 July 2012, Around 3.8 million chickens have been slaughtered as part of the effort to contain a bird-flu outbreak in the western state of Jalisco, Mexico's Senasica food safety agency said. More than 9.3 million other birds remain under observation, the agency said. The virus was detected at 33 of the 253 Jalisco chicken farms inspected by Senasica and 82 were found to be free of bird flu, while "diagnostic processes continue" at the other 138 facilities. Senasica said it has also begun to look at farms outside the 2 municipalities where the bird flu outbreak was detected last month [June 2012]. Avimex, Iasa and Ceva are producing 80 million doses of bird-flu vaccine that "will be available at the end of this month [July 2012]," Senasica said. The outbreak claimed 2.5 million chickens in the 1st 3 weeks and generated [USD] 50 million in losses, a representative of the Mexican poultry sector told Efe last week. Around 32 000 jobs could be lost if the virus is not immediately brought under control, according to Ricardo Estrada, president of the Poultry Farmers Association in Tepatitlan, Jalisco, one of the affected municipalities.

NATIONAL DISEASE REPORTS*

There were no national disease reports for MMWR Week 31.

INTERNATIONAL DISEASE REPORTS*

EBOLA HEMORRHAGIC FEVER (UGANDA): 3 August 2012, One more person is suspected to have died of the deadly Ebola virus in Kagadi hospital, while another 2 patients have been admitted to the hospital's isolation ward today. "The patient had been admitted in the isolation ward, with signs of having contracted Ebola. But, he unfortunately died in the evening, on arrival in the isolation ward," Dr. Dan Kyamanywa, who is Kibaale's district health officer, revealed. This brings the death toll to 17, and the suspected patients admitted to 31, according to Dr. Kyamanywa. Only 2 patients out of those admitted were on Wednesday confirmed to have contracted Ebola; 3 others were earlier this week also confirmed to have contracted Ebola, after laboratory tests were conducted. A total of 7 more specimens were taken on Wednesday [1 Aug 2012] from the patients admitted at the isolation facility bringing the total number of samples collected since the [beginning] of the outbreak to 37, according to Dr. Lwamafa. Results are to be released soon. The samples are currently being investigated at the Uganda Virus Research Institute, Entebbe. The health ministry's surveillance team in Kibaale district is actively and closely following up 232 people suspected to have been in contact with the dead and sick. They continue to monitored even though they have not showed any symptoms of the disease yet. More so, in Kibaale district, one of the prisoners, who had been admitted to the isolation ward, escaped and is yet to be found. An inter-ministerial committee on Ebola has been formed to coordinate the management of the epidemic. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

LEGIONELLOSIS (CANADA): 3 August 2012, An elderly person has died from Legionnaires' disease during a Quebec City outbreak that has caused 14 other cases. Authorities suspect the cause might be the air-conditioning system in a large public building -- although they haven't identified the building yet. The regional public-health authority has sent a notice to the owners of all large buildings within a 1.5km area to clean their cooling towers. It believes the bacteria that causes Legionnaires' [disease] developed in the stagnant water in one of those towers connected to the air-conditioning system. Legionnaires' disease is contracted by breathing in small droplets of water contaminated with the *Legionella* bacteria. The symptoms are similar to those of flu, including coughs, fever and chills. The disease is not contagious and cannot be transmitted from one person to another. It presents little or no risk to most people, although elderly people are more vulnerable. Radio-Canada reports that the victim [who died was] an 88-year-old woman. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents)*Non-suspect case

LEGIONELLOSIS (ENGLAND): 31 July, 2012, The source of an outbreak of 19 cases of Legionnaires' disease in Stoke-on-Trent, England appears to be a hot tub at a wholesale store. Investigators identified an "unusual strain" of *Legionella* bacteria on a hot tub at JTF Warehouse in the Fenton area of Stoke-on-Trent that matches samples taken from patients, according to a news release yesterday [30 Jul 2012] from the UK Health Protection Agency (HPA). Dr Sue Ibbotson, HPA regional director, said: "We have the evidence from DNA fingerprinting of samples from the hot tub and the patients being caused by the same previously unseen strain of *Legionella*." 17 of the 18 case-patients that were confirmed as of yesterday [30 Jul 2012] reported visiting the store. Included in the 18 are 2 cases confirmed yesterday, and health officials confirmed an additional case today, according to the BBC. A spokesperson from the area's Health and Safety Executive (HSE) said in the HPA release: "HSE continues to inspect premises where we are the enforcing authority and will do so until we have eliminated those sites from our investigations and are sufficiently assured there are no other possible sources." The hot tub model was pulled from all WTF Warehouse outlets, the BBC reported. Legionnaires' disease is a type of pneumonia caused by bacteria that can grow in warm water sources, such as air-conditioning units or hot tubs. People typically contract the disease by inhaling contaminated vapor or mist. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents)*Non-suspect case

YELLOW FEVER (PERU): 31 July 2012, The terrible yellow fever has taken the life of a pregnant adolescent girl, approximately 16 years old, in the Union Mantaro community, Canayre district, Huanta province, in the Apurimac, Ene and Mantaro river valley (VRAEM) [Ayacucho region], stated the Coordinator of Strategy for Vector-borne Diseases of the Office of the Director of Regional Health (DIRESA), Gaudencio Arone. "VRAEM is considered a

high risk area for the presence of yellow fever. People become infected due to carelessness or unawareness, so it is important that people who frequent this area get vaccinated 10 days before traveling there. The immunization is free in all health establishments," said the official. So far this year [2012], 2 cases are registered due to adverse reactions to yellow fever vaccine. The individuals are a young man from the Nueva Jerusalen community in the Santa Rosa district and a 35-year-old woman from Palmapampa. According to reports from DIRESA, both patients developed symptoms of the disease and are currently in stable condition. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

JAPANESE ENCEPHALITIS (INDIA): 30 July 2012, A 9-year-old child succumbed to encephalitis here taking the toll in the viral disease in eastern Uttar Pradesh to 146 this year [2012], health officials said here today [30 Jul 2012]. According to Additional Director (Health) Diwakar Prasad, the child from Mahrajganj district succumbed to the disease at BRD Medical College Hospital yesterday [29 Jul 2012]. He said that 18 new patients afflicted with suspected encephalitis have been admitted to the BRD MCH yesterday while 69 are being treated in different government hospitals of the region. A total 756 encephalitis patients were admitted to these hospitals in the current year [2012], of which 146 died, Prasad said, adding that the dead include 19 patients from Bihar and one from Nepal. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

**National and International Disease Reports are retrieved from http://www.promedmail.org/.*

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Zachary Faigen, MSPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: ZFaigen@dhmh.state.md.us

Anikah H. Salim, MPH, CPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-2074
Fax: 410-333-5000
Email: ASalim@dhmh.state.md.us

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable